

AMENDED IN ASSEMBLY APRIL 8, 2010

CALIFORNIA LEGISLATURE—2009—10 REGULAR SESSION

ASSEMBLY BILL

No. 1923

Introduced by Assembly Member Evans

February 16, 2010

An act to amend Section 2851 of the Public Utilities Code, relating to energy.

LEGISLATIVE COUNSEL'S DIGEST

AB 1923, as amended, Evans. Energy: ~~photovoltaic panels~~. solar energy systems: theft prevention.

Under existing law, the Public Utilities Commission (CPUC) has regulatory authority over public utilities, including electrical corporations, as defined. Decisions of the CPUC adopted the California Solar Initiative. Existing law requires the CPUC to undertake certain steps in implementing the California Solar Initiative. Existing law prohibits the CPUC, in implementing the California Solar Initiative, from allocating more than \$50,000,000 for research, development, and demonstration that explores solar technologies and other distributed generation technologies that employ or could employ solar energy for generation or storage of electricity or to offset natural gas usage.

This bill would authorize moneys allocated by the CPUC for research, development, and demonstration pursuant to the California Solar Initiative, to be used for research, development, and demonstration for antitheft technology to protect investments in solar energy systems.

~~Existing law requires the State Energy Resources Conservation and Development Commission to initiate a public proceeding to study and make findings whether, and under what conditions, solar energy systems should be required on new residential and nonresidential buildings and~~

~~to periodically update the study. For these purposes, “solar energy system” means a photovoltaic solar collector or other photovoltaic solar energy device.~~

~~Existing law establishes the Solar Training, Education, and Certification Act of 2001. The act authorizes a local government to develop and administer a program to encourage the construction of buildings that use solar thermal and photovoltaic systems.~~

~~This bill would state the intent of the Legislature to enact legislation to discourage the theft of photovoltaic panels.~~

Vote: majority. Appropriation: no. Fiscal committee: no.
State-mandated local program: no.

The people of the State of California do enact as follows:

1 *SECTION 1. The Legislature finds and declares all of the*
2 *following:*

3 *(a) Solar-generated electricity is uniquely suited to California’s*
4 *needs because it produces electricity when the state most needs*
5 *it, during the peak demand hours in summer afternoons when the*
6 *sun is brightest and the demand is at its highest.*

7 *(b) Procuring solar energy systems to meet peak electricity*
8 *demand increases system reliability and decreases the state’s*
9 *dependence on unstable fossil fuel supplies.*

10 *(c) Increasing solar energy’s portion of the state’s electricity*
11 *generation market will bring additional manufacturing,*
12 *installation, and sales jobs to the state at a higher rate than most*
13 *conventional energy production sources.*

14 *(d) The benefits of expanding the use of solar energy to generate*
15 *electricity are numerous. Solar energy systems make use of secure,*
16 *indigenous, and sustainable natural resources and provide*
17 *substantial energy reliability. Solar energy has pollution reduction*
18 *benefits, diversifies the state’s energy supply, and thereby reduces*
19 *the state’s dependence on imported fossil fuels.*

20 *(e) Installing solar energy systems contributes to the state’s*
21 *achieving its climate change goals required by the California*
22 *Global Warming Solutions Act of 2006 (Division 25.5 (commencing*
23 *with Section 38500) of the Health and Safety Code).*

24 *(f) Over the past 15 years, the state has made significant*
25 *investments and commitments to solar energy through the following*
26 *actions:*

1 *(1) In 1995, legislation established net energy metering and*
2 *declared that a program to provide net energy metering is one*
3 *way to encourage private investment in renewable energy*
4 *resources, stimulate in-state economic growth, enhance the*
5 *continued diversification of California's energy resource mix, and*
6 *reduce interconnection and administrative costs for electricity*
7 *suppliers.*

8 *(2) In 2002, the state established the California Renewables*
9 *Portfolio Standard Program with the goal of increasing the*
10 *percentage of renewable energy in the state's energy supply to 20*
11 *percent by 2017. In 2006, legislation accelerated the timeline to*
12 *20 percent by 2010. In the 2008 update to the state's Energy Action*
13 *Plan, the State Energy Resources Conservation and Development*
14 *Commission and the Public Utilities Commission jointly supported*
15 *expanding the state's renewable energy goals to attain the target*
16 *of generating 33 percent of total retail sales of electricity in the*
17 *state from eligible renewable energy resources.*

18 *(3) Beginning in late 2005 and continuing into 2006, the Public*
19 *Utilities Commission established the California Solar Initiative to*
20 *lead to one million solar roofs in California by 2018. While the*
21 *commission was still formulating the California Solar Initiative,*
22 *legislation was enacted that established as goals of the state, to*
23 *install solar energy systems with a generation capacity equivalent*
24 *of 3,000 megawatts, to establish a self-sufficient solar industry in*
25 *which solar energy systems are a viable mainstream option for*
26 *both homes and businesses in 10 years, and to place solar energy*
27 *systems on 50 percent of new homes in 13 years.*

28 *(4) In 2008, legislation enhanced the state's commitment to*
29 *solar energy by extending and expanding a property tax exclusion*
30 *for projects that utilize an active solar energy system and*
31 *builder-installed active solar energy systems in new homes.*

32 *(g) Wineries, rural commercial properties, and individual solar*
33 *energy system owners throughout the state have been subjected*
34 *to increasing thefts related to their investment in solar technology.*
35 *Between June 2008 and September 2009, in Napa County alone,*
36 *over 400 solar panels worth more than \$400,000 were stolen from*
37 *wineries.*

38 *(h) The state has the ability to provide security for consumers*
39 *who have invested in an energy source with public support and*
40 *benefit. By doing so, the state can protect the strong investment it*

1 *has made in the renewable energy sector of the state's electricity*
2 *generation market.*

3 *(i) The California Solar Initiative includes \$50 million for*
4 *"Research, Development, Deployment, and Demonstration." To*
5 *support California's investment in, and commitment to, solar*
6 *energy, a portion of the funds should be invested in theft*
7 *prevention, tracking, and security for solar panels.*

8 *SEC. 2. Section 2851 of the Public Utilities Code is amended*
9 *to read:*

10 2851. (a) In implementing the California Solar Initiative, the
11 commission shall do all of the following:

12 (1) The commission shall authorize the award of monetary
13 incentives for up to the first megawatt of alternating current
14 generated by solar energy systems that meet the eligibility criteria
15 established by the State Energy Resources Conservation and
16 Development Commission pursuant to Chapter 8.8 (commencing
17 with Section 25780) of Division 15 of the Public Resources Code.
18 The commission shall determine the eligibility of a solar energy
19 system, as defined in Section 25781 of the Public Resources Code,
20 to receive monetary incentives until the time the State Energy
21 Resources Conservation and Development Commission establishes
22 eligibility criteria pursuant to Section 25782. Monetary incentives
23 shall not be awarded for solar energy systems that do not meet the
24 eligibility criteria. The incentive level authorized by the
25 commission shall decline each year following implementation of
26 the California Solar Initiative, at a rate of no less than an average
27 of 7 percent per year, and shall be zero as of December 31, 2016.
28 The commission shall adopt and publish a schedule of declining
29 incentive levels no less than 30 days in advance of the first decline
30 in incentive levels. The commission may develop incentives based
31 upon the output of electricity from the system, provided those
32 incentives are consistent with the declining incentive levels of this
33 paragraph and the incentives apply to only the first megawatt of
34 electricity generated by the system.

35 (2) The commission shall adopt a performance-based incentive
36 program so that by January 1, 2008, 100 percent of incentives for
37 solar energy systems of 100 kilowatts or greater and at least 50
38 percent of incentives for solar energy systems of 30 kilowatts or
39 greater are earned based on the actual electrical output of the solar
40 energy systems. The commission shall encourage, and may require,

1 performance-based incentives for solar energy systems of less than
2 30 kilowatts. Performance-based incentives shall decline at a rate
3 of no less than an average of 7 percent per year. In developing the
4 performance-based incentives, the commission may:

5 (A) Apply performance-based incentives only to customer
6 classes designated by the commission.

7 (B) Design the performance-based incentives so that customers
8 may receive a higher level of incentives than under incentives
9 based on installed electrical capacity.

10 (C) Develop financing options that help offset the installation
11 costs of the solar energy system, provided that this financing is
12 ultimately repaid in full by the consumer or through the application
13 of the performance-based rebates.

14 (3) By January 1, 2008, the commission, in consultation with
15 the State Energy Resources Conservation and Development
16 Commission, shall require reasonable and cost-effective energy
17 efficiency improvements in existing buildings as a condition of
18 providing incentives for eligible solar energy systems, with
19 appropriate exemptions or limitations to accommodate the limited
20 financial resources of low-income residential housing.

21 (4) Notwithstanding subdivision (g) of Section 2827, the
22 commission may develop a time-variant tariff that creates the
23 maximum incentive for ratepayers to install solar energy systems
24 so that the system's peak electricity production coincides with
25 California's peak electricity demands and that assures that
26 ratepayers receive due value for their contribution to the purchase
27 of solar energy systems and customers with solar energy systems
28 continue to have an incentive to use electricity efficiently. In
29 developing the time-variant tariff, the commission may exclude
30 customers participating in the tariff from the rate cap for residential
31 customers for existing baseline quantities or usage by those
32 customers of up to 130 percent of existing baseline quantities, as
33 required by Section 80110 of the Water Code. Nothing in this
34 paragraph authorizes the commission to require time-variant pricing
35 for ratepayers without a solar energy system.

36 (b) Notwithstanding subdivision (a), in implementing the
37 California Solar Initiative, the commission may authorize the award
38 of monetary incentives for solar thermal and solar water heating
39 devices, in a total amount up to one hundred million eight hundred
40 thousand dollars (\$100,800,000).

1 (c) (1) In implementing the California Solar Initiative, the
2 commission shall not allocate more than fifty million dollars
3 (\$50,000,000) to research, development, and demonstration that
4 explores solar technologies and other distributed generation
5 technologies that employ or could employ solar energy for
6 generation or storage of electricity or to offset natural gas usage.
7 *Moneys allocated for research, development, and demonstration*
8 *may also be used for research, development, and demonstration*
9 *for antitheft technology to protect investments in solar energy*
10 *systems.* Any program that allocates additional moneys to research,
11 development, and demonstration shall be developed in
12 collaboration with the Energy Commission to ensure there is no
13 duplication of efforts, and adopted by the commission through a
14 rulemaking or other appropriate public proceeding. Any grant
15 awarded by the commission for research, development, and
16 demonstration shall be approved by the full commission at a public
17 meeting. This subdivision does not prohibit the commission from
18 continuing to allocate moneys to research, development, and
19 demonstration pursuant to the self-generation incentive program
20 for distributed generation resources originally established pursuant
21 to Chapter 329 of the Statutes of 2000, as modified pursuant to
22 Section 379.6.

23 (2) The Legislature finds and declares that a program that
24 provides a stable source of monetary incentives for eligible solar
25 energy systems will encourage private investment sufficient to
26 make solar technologies cost effective.

27 (3) On or before June 30, 2009, and by June 30th of every year
28 thereafter, the commission shall submit to the Legislature an
29 assessment of the success of the California Solar Initiative program.
30 That assessment shall include the number of residential and
31 commercial sites that have installed solar thermal devices for which
32 an award was made pursuant to subdivision (b) and the dollar value
33 of the award, the number of residential and commercial sites that
34 have installed solar energy systems, the electrical generating
35 capacity of the installed solar energy systems, the cost of the
36 program, total electrical system benefits, including the effect on
37 electrical service rates, environmental benefits, how the program
38 affects the operation and reliability of the electrical grid, how the
39 program has affected peak demand for electricity, the progress
40 made toward reaching the goals of the program, whether the

1 program is on schedule to meet the program goals, and
2 recommendations for improving the program to meet its goals. If
3 the commission allocates additional moneys to research,
4 development, and demonstration that explores solar technologies
5 and other distributed generation technologies pursuant to paragraph
6 (1), the commission shall include in the assessment submitted to
7 the Legislature, a description of the program, a summary of each
8 award made or project funded pursuant to the program, including
9 the intended purposes to be achieved by the particular award or
10 project, and the results of each award or project.

11 (d) (1) The commission shall not impose any charge upon the
12 consumption of natural gas, or upon natural gas ratepayers, to fund
13 the California Solar Initiative.

14 (2) Notwithstanding any other provision of law, any charge
15 imposed to fund the program adopted and implemented pursuant
16 to this section shall be imposed upon all customers not participating
17 in the California Alternate Rates for Energy (CARE) or family
18 electric rate assistance (FERA) programs as provided in paragraph
19 (2), including those residential customers subject to the rate cap
20 required by Section 80110 of the Water Code for existing baseline
21 quantities or usage up to 130 percent of existing baseline quantities
22 of electricity.

23 (3) The costs of the program adopted and implemented pursuant
24 to this section may not be recovered from customers participating
25 in the California Alternate Rates for Energy or CARE program
26 established pursuant to Section 739.1, except to the extent that
27 program costs are recovered out of the nonbypassable system
28 benefits charge authorized pursuant to Section 399.8.

29 (e) In implementing the California Solar Initiative, the
30 commission shall ensure that the total cost over the duration of the
31 program does not exceed three billion three hundred fifty million
32 eight hundred thousand dollars (\$3,350,800,000). The financial
33 components of the California Solar Initiative shall consist of the
34 following:

35 (1) Programs under the supervision of the commission funded
36 by charges collected from customers of San Diego Gas and Electric
37 Company, Southern California Edison Company, and Pacific Gas
38 and Electric Company. The total cost over the duration of these
39 programs shall not exceed two billion one hundred sixty-six million
40 eight hundred thousand dollars (\$2,166,800,000) and includes

1 moneys collected directly into a tracking account for support of
2 the California Solar Initiative and moneys collected into other
3 accounts that are used to further the goals of the California Solar
4 Initiative.

5 (2) Programs adopted, implemented, and financed in the amount
6 of seven hundred eighty-four million dollars (\$784,000,000), by
7 charges collected by local publicly owned electric utilities pursuant
8 to Section 387.5. Nothing in this subdivision shall give the
9 commission power and jurisdiction with respect to a local publicly
10 owned electric utility or its customers.

11 (3) Programs for the installation of solar energy systems on new
12 construction, administered by the State Energy Resources
13 Conservation and Development Commission pursuant to Chapter
14 8.6 (commencing with Section 25740) of Division 15 of the Public
15 Resources Code, and funded by nonbypassable charges in the
16 amount of four hundred million dollars (\$400,000,000), collected
17 from customers of San Diego Gas and Electric Company, Southern
18 California Edison Company, and Pacific Gas and Electric Company
19 pursuant to Article 15 (commencing with Section 399).

20 ~~SECTION 1. It is the intent of the Legislature to enact~~
21 ~~legislation to discourage the theft of photovoltaic panels.~~